

# TESTIMONY ON GOOD SAMARITAN LIABILITY AND ABANDONED MINE CLEANUP

#### **SUBMITTED**

TO

# CHAIRMAN JIMMY DUNCAN SUBCOMMITTEE ON WATER RESOURCES AND ENVIRONMENT COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE U.S. HOUSE OF REPRESENTATIVES

PRESENTED BY

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Mr. Chairman, and members of the Subcommittee, thank you for the opportunity to appear before you today to discuss an issue of great importance to Western states and California in particular – "Good Samaritan" Legislation. I appear before the subcommittee as Director of wastewater services for the East Bay Municipal Utility District. On behalf of the East Bay Municipal Utility District Board of Directors and our General Manager, Dennis Diemer, I am pleased to provide you with our experiences and recommendations related to abandoned mine cleanups. Although "Good Samaritan" legislation is often thought of in conjunction with abandoned mines, it could apply to any situation involving clean-up efforts by states or other third parties who are not legally responsible for the existing conditions at a site.

## THE EBMUD CASE STUDY

As part of my testimony I'd like to start by relating an example of how lack of Good Samaritan legislation resulted in some fairly significant adverse impacts to my agency in our attempt to help mitigate a significant environmental problem, that of Penn Mine which is an abandoned mine in the northern California foothills of the Sierra Nevada mountains.

# **Background**

The East Bay Municipal Utility District (EBMUD) was formed by the California Legislature in 1921 and provides water service to over 1.3 million customers and wastewater service to over 600,000 customers. EBMUD's 375 square mile service area includes portions of Alameda and Contra

Costa counties, east of San Francisco Bay. The primary source of water supply for EBMUD is the Mokelumne River located in the Sierra Nevada mountains about 90 miles east of the District's service area. EBMUD constructed Pardee Dam on the Mokelumne River to store water for its customers in 1928 and delivers that water to the East Bay through three aqueducts.

In 1963, the District constructed Camanche Reservoir to support water supply needs and provide flood control. The reservoir also provides recreation and supports downstream fisheries. In constructing the reservoir, the District identified the Penn Mine site as a significant threat to water quality.

Penn Mine operated primarily as a copper and zinc mine from 1861 until 1953. The mine produced 82,500,000 pounds of copper, 22,200,000 of zinc, 1,200,000 of lead, 67,700 ounces of gold, and 2,150,000 ounces of silver. During the 1940's, Penn Mine was the largest producer of copper in California.

#### **Penn Mine**

Penn Mine was abandoned in the late 1950s, leaving behind approximately 400,000 cubic yards of mine waste. Rainfall and runoff produced acid rock drainage from the mine waste and resulted in discharges of low pH (2-4) water laden with elevated concentrations of copper and zinc. These discharges had historically impacted the Mokelumne River causing fish kills and long-term problems with copper concentrations exceeding water

quality objectives. Estimates of annual discharges of copper exceed 100,000 pounds.

Beginning in 1958, EBMUD began working with the Central Valley Regional Water Quality Control Board (CVRWQCB), a regional office of the California State Water Resources Control Board, to address the problems at Penn Mine. The CVRWQCB issued waste discharge requirements (WDR) to the owners of Penn Mine, and in 1964 issued a Cease and Desist Order (CDO). In 1972, revised WDRs were issued and, in 1973, a new CDO was issued. In 1977, a Cleanup and Abatement Order with notice of State Action and recovery of costs was issued. In 1978, the CVRWQCB adopted a resolution proposing remediation/abatement actions and requesting EBMUD and other agencies support the abatement actions. The Abatement Plan included:

- Building a dam to contain runoff from the site
- Constructing diversions to route upstream runoff around the site
- Constructing a series of evaporation ponds
- Installing a recirculation system to improve evaporation and maximize storage

The Abatement Plan improvements were completed in 1978 as a joint effort between EBMUD and the CVRWQCB. The Abatement Plan reduced and controlled the discharge of pollutants into the Mokelumne River and Camanche Reservoir.

### **Liability For Abatement Plan**

In the early 1990s, the Committee to Save the Mokelumne and the California Sportfishing Alliance (Committee) filed suit to require that EBMUD obtain an NPDES permit for the discharges from the Abatement Plan improvements. The suit claimed that the Abatement Plan improvements constituted a discharge of pollutants to the waters of the US that required an NPDES permit and that the Abatement Plan had exacerbated the generation of pollutants from the site. Despite the fact that EBMUD had worked with the appropriate regulatory agency, and that the Abatement Plan provided water quality protections, the court sided with the Committee and ordered EBMUD to obtain an NPDES permit; this decision was upheld by the Ninth Circuit Court. EBMUD and CVRWQCB appealed to the Supreme Court; however, that appeal was denied.

In 1993, EBMUD and the CVRWQCB worked with EPA Region 9 on an interim plan to treat runoff from the site to further reduce pollutants; this plan was memorialized in an Order from Region 9.

#### **Final Restoration**

In 1995, the Committee, the CVRWQCB, and EBMUD agreed to work together towards a long-term solution. With the active involvement of stakeholders, EBMUD and the CVRWQCB developed a plan, and in 1997 certified an environmental impact report outlining a preferred alternative to remediate the site to pre-mining conditions. The key elements of the plan included:

- Removing mine waste
- Constructing a landfill to contain and isolate mine waste
- Restoring water courses and re-vegetation of entire site
- Monitoring water quality

The estimated costs of the plan totaled \$10 million, to be shared equally between EBMUD and the CVRWQCB. The EPA Region 9 Order was revised to reflect implementation of the plan. The plan was completed in 2000 and, based on the performance of the project; EPA Region 9 rescinded the Order in 2003.

Returning the site to pre-mining conditions reduced annual copper discharges by 98% and annual zinc discharges by 93%.

# **Continuing Legacy**

EBMUD and the CVRWQCB have ongoing responsibility for the landfill and the restored site, including monitoring vegetation management and any emerging issues with respect to runoff or groundwater. Nationally, an estimated 550,000 abandoned hardrock mines exist, and in California, there are approximately 39,000 inactive or abandoned hardrock mines. They represent a significant source of pollutants and continue to impact water quality throughout the state. The experience of EBMUD and the CVRWQCB has had a chilling effect on "Good Samaritan" remediation efforts, resulting in no further projects being initiated.

# **NEED FOR GOOD SAMARITAN LEGISLATION**

As can be seen from the EBMUD case study, regulatory approaches to address the environmental impacts of abandoned or inactive mines are often fraught with difficulties, starting with the challenge of identifying legally responsible and financially viable parties for particular impacted sites. In many cases the mine operators responsible for conditions at a site may be long gone. The land and mineral ownership patterns in mining districts are extremely complex and highly differentiated. The surface and mineral estates at mine sites are often severed not to mention the fact that water rights may exist for mine drainage. It is not uncommon for there to be dozens of parties with partial ownership or operational histories associated with a given site.

In view of the impacts on water quality caused by these abandoned mines and the difficulties in identifying responsible parties to remediate the sites there is a great interest in undertaking and encouraging voluntary "Good Samaritan" remediation initiatives (i.e., clean-up effort by states or other third parties who are not legally responsible for the existing conditions at a site). However, states, local government and private parties currently are dissuaded from taking measures to clean-up the mines due to an overwhelming disincentive in the Clean Water Act.

It should also be noted that Good Samaritan legislation could address situations other than pollution from inactive or abandoned mines. In the San Francisco Bay Area there have been studies that have shown that the Bay is impaired from legacy materials such as polychlorinated biphenyls

(PCBs) and pesticides such as DDT and dieldrin. It has also been documented that toxic hot spots exist in the Bay where sediment laden with these pollutants are continuing to pollute the Bay. Currently there are neither funds nor plans for addressing this significant problem which has been caused by chemicals being discharged to the Bay which have long ago been banned. Thinking even further outside of the box, Good Samaritan legislation could perhaps assist a community in finding the needed resources to help clean-up "Brownfields."

#### INTERFACE WITH TMDLS

The passage of Good Samaritan legislation would be a significant step forward in helping states clean-up impaired waters. I'd like to use the San Francisco Bay mercury Total Maximum Daily Load (TMDL) as an example of how this could work.

High levels of mercury in San Francisco Bay are primarily the result of mining during California's Gold Rush and a variety of contemporary sources. As part of the gold extraction process mercury was used to extract gold from gold bearing rocks and during the extraction process was released into the air and waterways. Much of this mercury washed downstream to San Francisco Bay. Approximately 26,000,000 pounds of mercury were used in gold mining operations in the 19<sup>th</sup> century. As much as 8,000,000 pounds of mercury accumulated in Bay sediment. A significant amount of this mercury came from mercury mines in the San Francisco Bay Area. These mines left a legacy of mercury pollution in piles of waste rock, surface soils, and stream sediment. Mercury is

bioaccumulative and concentrates itself through the food web ultimately resulting in unsafe levels of mercury in fish tissue of fish caught, often by subsistent fishermen, in the Bay. In humans mercury is a neuro toxin affecting the brain and spinal cord and interfering with nerve functions. It is particularly dangerous to pregnant women and small children.

The mercury TMDL report prepared by the San Francisco Regional Water Quality Control Board lists the major sources of mercury in the Bay. One of the most significant sources is runoff from abandoned mine sites. Of the 1,220 kilograms of mercury entering San Francisco Bay each year, discharges from municipal wastewater treatment plants account for only 17 kilograms per year. Being a deminimus source (less than 2 percent per year), it is widely known and accepted that if all discharges from municipal wastewater treatment plants were immediately halted there would be no discernable net environmental benefit to San Francisco Bay. Even so, the State is proposing that municipal wastewater dischargers cut back their discharge of mercury by 40 percent over the next 20 years. Although pollution prevention educational efforts and source control measures are certainly the first approach to addressing this ominous task of reducing mercury discharges, it is clear that these efforts alone will not allow municipal wastewater treatment plants to meet the stringent levels of reduction being proposed. Absent the ability to offset their discharges by pursuing more cost-effective reductions elsewhere, it has been estimated that municipal dischargers in the Bay Area will ultimately need to construct tertiary filtration facilities which would cost hundreds of millions of dollars and result in sewer fee increases for Bay Area residents on the order of \$200,000,000 - \$300,000,000 more per year.

The situation I have described for the mercury TMDL in San Francisco Bay is not an isolated example. The City of Sacramento is faced with a similar situation being a deminimus discharger of mercury into the Sacramento River and faced with the requirement for significant reductions in their mass discharge. Many abandoned mines in the Sacramento River watershed offer the potential for a more rational solution to their problem than installation of costly capital facilities which would ultimately result in negligible environmental benefit.

TMDLs are also being prepared in the San Francisco Bay Area for legacy pesticides such as dieldrin and DDT as well as PCBs. These substances have been banned for many years and thus the effectiveness of rigorous source control and pollution prevention efforts is questionable. It is known that there are many toxic hot spots in San Francisco Bay and its tributary waters which show high concentration of these pollutants in their sediments. Once again, the ability to spend limited public resources cost-effectively such that the maximum environmental benefit is achieved for the dollars spent is certainly a goal that it would seem all can support. The barriers however need to be removed.

#### BARRIERS TO THE GOOD SAMARITAN APPROACH

Whether it be for truly altruistic reasons, which is often associated with the "Good Samaritan" concept, or rational cost-effective approaches whereby society can achieve removal of impairments to our nation's waterways, the issue is the same; and that being there needs to be some legal protection and reasonable guidance whereby an entity can make improvements that

will ultimately reduce pollutant loading to waterways in areas where they have no legal responsibility or ownership without the fear of reprisals.

# **KEY PROVISIONS OF GOOD SAMARITAN LEGISLATION**

The overall goal of Good Samaritan legislation would be to provide a framework in which to work to resolve the liability disincentive problem that is currently preventing many potential Good Samaritan clean-up projects from going forward. Key provisions of such legislation should include the following:

- Provides a process to assure that proposed projects make sense from an environmental standpoint and that they will not be authorized unless there is a sound basis to conclude that they will result in water quality improvements.
- 2. It provides assurance that a remediating party will carry out a project as approved in an environmentally sound manner without imposing unnecessary and infeasible standard NPDES permit requirements.
- 3. It provides that after completion of a remediation project the remediating party can terminate its permit without continuing responsibility for remaining discharges at a site.
- 4. It assures that the existing legal liability of those properly responsible for discharges at a site prior to the implementation of a Good Samaritan project is not affected in any way.

### **OTHER CONSIDERATIONS**

In addition to the key provisions enumerated above, there are other considerations that should be addressed. These other considerations could be included as part of the legislation itself or via accompanying documents describing the legislative intent or other mechanism such as policy, guidelines, or regulations. These other considerations from a municipal discharger's perspective are as follows:

- 1. Any initiative to move forward and clean-up a pollutant site must be voluntary.
- 2. The cost of the municipal wastewater discharger's efforts to cleanup a site must be stable and must be reasonably related to actual implementation cost estimates such that a "blank check" situation is avoided.
- 3. If the clean-up is done as an alternative to a more costly pollutant reduction effort, (i.e., treatment of the municipal wastewater) the amount of pollutant to be removed via the clean-up must be reasonably related to the amount that would otherwise need to be removed by the municipal discharger in order to meet permit limits at the plant site.
- 4. If the clean-up is being done as an offset, the clean-up needs to be adequately addressed in an NPDES permit or other mechanism as appropriate.

- 5. If clean-ups are being done as part of an offset approach, a mitigation bank is an important mechanism that could foster additional clean-up efforts.
- 6. Any clean-up effort must involve close coordination and participation of local, state, and federal regulators.
- Habitat restoration as well as clean-up of a specific site should be incorporated into the Good Samaritan concept in order to maximize opportunities for environmental benefits.

#### SUMMARY

East Bay Municipal Utility District supports Good Samaritan legislation with the intent to eliminate current disincentives to voluntary cooperative efforts aimed at reducing water quality impacts from abandoned or inactive mines as well as other potential clean-up efforts, such as toxic hot spots, which may be pursued in an effort to offset more costly alternatives which result in little environmental benefit. We believe Good Samaritan legislation will result in immediate and significant improvement in the water quality of some of our country's most polluted water bodies. Failure to pursue this initiative would result in continued degradation for the foreseeable future of many Western streams and waterways impacted by not only historical mining activities but also legacy pollutants which have long ago been banned. We urge you to move forward with this legislation as we feel, more than ever before, the time is right and the need is great for this initiative.